

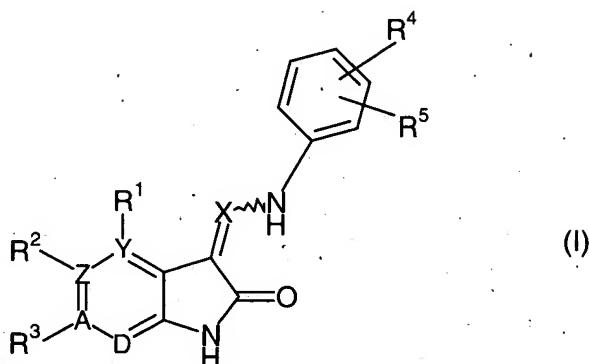
Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

What is claimed is:

1. (Original) A compound of the formula:



wherein:

X is selected from the group consisting of: N, CH, CCF₃, and C(C₁₋₁₂ aliphatic);

Y is C or N, with the proviso that when Y is N, R¹ is absent, and Z, A and D are each C;

Z is C or N, with the proviso that when Z is N, R² is absent, and Y, A and D are each C;

A is C or N, with the proviso that when A is N, R³ is absent, and Y, Z and D are each C;

D is C or N, with the proviso that when D is N, then Y, Z and A are each C;
with the further proviso that Y, Z, A, and D do not simultaneously all represent C;
R¹ is selected from the group consisting of: hydrogen, C₁₋₁₂ aliphatic, thiol,
hydroxy, hydroxy-C₁₋₁₂ aliphatic, Aryl, Aryl-C₁₋₁₂ aliphatic, R⁶-Aryl-C₁₋₁₂
aliphatic, Cyc, Cyc-C₁₋₆ aliphatic, Het, Het-C₁₋₁₂ aliphatic, C₁₋₁₂ alkoxy, Aryloxy,

amino, C1-12 aliphatic amino, di-C1-12 aliphatic amino, di-C1-12 aliphatic aminocarbonyl, di-C1-12 aliphatic aminosulfonyl, C1-12 alkoxycarbonyl, halogen, cyano, sulfonamide and nitro, where R6, Aryl, Cyc and Het are as defined below; R2 is selected from the group consisting of: hydrogen, C1-12 aliphatic, N-hydroxyimino-C1-12 aliphatic, C1-12 alkoxy, hydroxy-C1-12 aliphatic, C1-12 alkoxycarbonyl, carboxyl C1-12 aliphatic, Aryl, R6-Aryl-oxycarbonyl, R6-oxycarbonyl-Aryl, Het, aminocarbonyl, C1-12 aliphatic-aminocarbonyl, Aryl-C1-12 aliphatic-aminocarbonyl, R6-Aryl-C1-12 aliphatic-aminocarbonyl, Het-C1-12 aliphatic-aminocarbonyl, hydroxy-C1-12 aliphatic-aminocarbonyl, C1-12-alkoxy-C1-12 aliphatic-aminocarbonyl, C1-12 alkoxy-C1-12 aliphatic-amino, di-C1-12 aliphatic amino, di-C1-12 aliphatic aminocarbonyl, di-C1-12 aliphatic aminosulfonyl, halogen, hydroxy, nitro, C1-12 aliphatic-sulfonyl, aminosulfonyl and C1-12 aliphatic-aminosulfonyl, where R6 Aryl and Het are as defined below; R1 and R2 are optionally joined to form a fused ring selected from the group as defined for Het below, and said fused ring is optionally substituted by one or more substituents selected from the group consisting of: C1-12 aliphatic, halogen, nitro, cyano, C1-12 alkoxy, carbonyl-C1-12 alkoxy and oxo;

R3 is selected from the group consisting of: hydrogen, C1-12 aliphatic, hydroxy, hydroxy C1-12 aliphatic, di-C1-12 aliphatic amino, di-C1-12 aliphatic aminocarbonyl, di-C1-12 aliphatic aminosulfonyl, C1-12 alkoxy, Aryl, Aryloxy, hydroxy-Aryl, Het, hydroxy-Het, Het-oxy and halogen, where Aryl and Het are as defined below;

R2 and R3 are optionally joined to form a fused ring selected from the group as defined for Het below, and said fused ring is optionally substituted by C1-6 aliphatic and/or C1-6 aliphatic-carbonyl;

R4 is selected from the group consisting of: sulfonic acid, C1-12 aliphatic-sulfonyl, sulfonyl- C1-12 aliphatic, C1-12 aliphatic-sulfonyl-C1-6 aliphatic, C1-6 aliphatic-amino, R7-sulfonyl, R7-sulfonyl-C1-12 aliphatic, R7-aminosulfonyl, R7-aminosulfonyl-C1-12 aliphatic, R7-sulfonylamino, R7-sulfonylamino-C1-12 aliphatic, aminosulfonylamino, di-C1-12 aliphatic amino, di-C1-12 aliphatic aminocarbonyl, di-C1-12 aliphatic aminosulfonyl, di-C1-12 aliphatic amino, di-C1-

12 aliphatic aminocarbonyl, di-C1-12 aliphatic aminosulfonyl-C1-12 aliphatic, (R8)1-3-Arylamino, (R8)1-3-Arylsulfonyl, (R8)1-3-Aryl-aminosulfonyl, (R8)1-3-Aryl-sulfonylamino, Het-amino, Het-sulfonyl, Het-amino, Het-amino, aminoiminoamino and aminoiminoaminosulfonyl, where R7, R8, Aryl and Het are as defined below; R5 is hydrogen or R4 and R5 are optionally joined to form a fused ring selected from the group as defined for Het below, and said fused ring is optionally substituted by one or more substituents selected from the group consisting of: C1-12 aliphatic, oxo and dioxo;

R6 is selected from the group consisting of: C1-12 aliphatic, hydroxy, C1-12 alkoxy and halogen;

R7 is selected from the group consisting of: hydrogen, C1-12 aliphatic, C1-12 alkoxy, hydroxy-C1-12 alkoxy, hydroxy-C1-12 aliphatic, carboxylic acid, C1-12 aliphatic-carbonyl, Het, Het-C1-12-aliphatic, Het-C1-12-alkoxy, di-Het-C1-12-alkoxy Aryl, Aryl-C1-12-aliphatic, Aryl-C1-12-alkoxy, Aryl-carbonyl, C1-18 alkoxyalkoxyalkoxyalkoxyaliphatic and hydroxyl, where Het and Aryl are as defined below;

R8 is selected from the group consisting of: hydrogen, nitro, cyano, C1-12 alkoxy, halo, carbonyl-C1-12 alkoxy and halo-C1-12 aliphatic;

Aryl is selected from the group consisting of: phenyl, naphthyl, phenanthryl and anthracenyl;

Cyc is selected from the group consisting of: cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl and cyclooctyl, and optionally has one or more degrees of unsaturation;

Het is a saturated or unsaturated heteroatom ring system selected from the group consisting of: benzimidazole, dihydrothiophene, dioxin, dioxane, dioxolane, dithiane, dithiazine, dithiazole, dithiolane, furan, imidazole, isoquinoline, morpholine, oxazole, oxadiazole, oxathiazole, oxathiazolidine, oxazine, oxadiazine, piperazine, piperidine, pyran, pyrazine, pyrazole, pyridine, pyrimidine, pyrrole, pyrrolidine, quinoline, tetrahydrofuran, tetrazine, thidiazine, thiadiazole,

thatriazole, thiazine, thiazole, thiomorpholine, thiophene, thiopyran, triazine and triazole;

and the salts, esters, amides, carbamates solvates, polymorphs, hydrates, polymorphs, affinity reagents and/or prodrugs thereof.

2 – 58 (Cancelled)